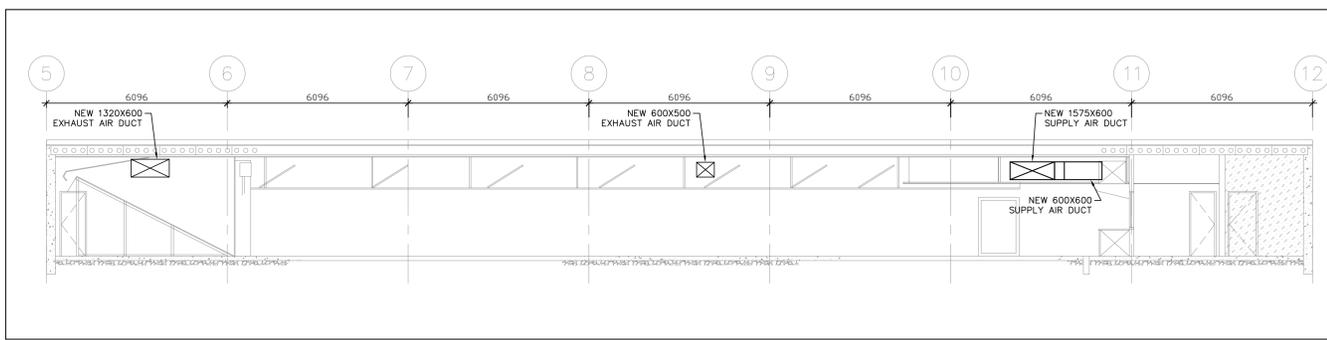
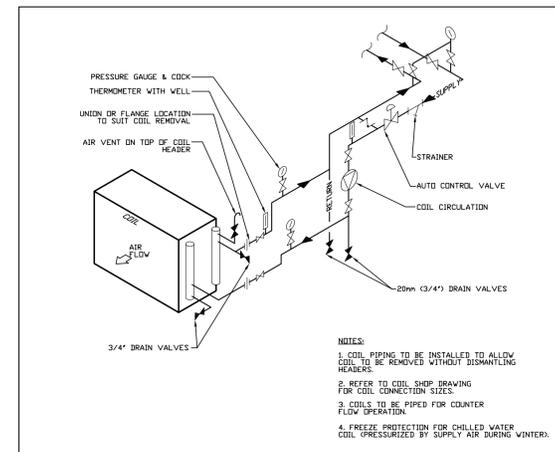


PRELIMINARY
NOT FOR CONSTRUCTION

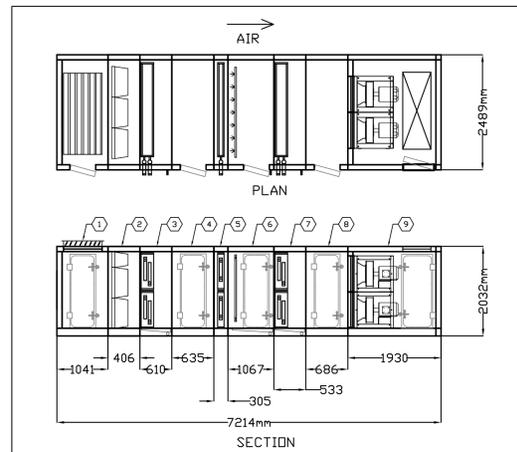
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1 SUB-BASEMENT – MECHANICAL SECTION
M1.2 | M1.2 1:100



6 TYPICAL COIL PIPING DETAIL
M1.2 | M1.2 NOT TO SCALE



(AHU-09)

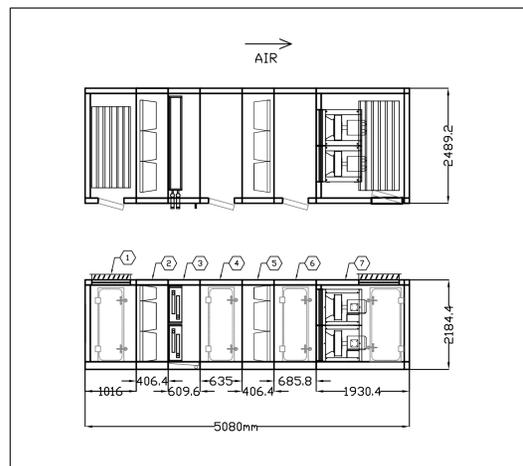
- ① INTAKE PLENUM
- ② 2" / 12" FILTERS
- ③ HEAT RECOVERY COILS
- ④ ACCESS
- ⑤ HEATING COIL
- ⑥ HUMIDIFIER
- ⑦ COOLING COIL
- ⑧ ACCESS
- ⑨ SUPPLY FANS

2 SUPPLY AIR HANDLING UNIT (AHU-09) DETAIL
M1.2 | M1.2 NOT TO SCALE

HOT WATER HEATING COIL SCHEDULE - PART 1														HOT WATER HEATING COIL SCHEDULE - PART 2																
TAG	SERVES	FACE SIZE		TUBE SIZE	ROWS	FINS PER	AIR SIDE								FLUID SIDE						NOTES									
		WIDTH (mm)	HEIGHT (mm)				FLOW RATE (L/s)	PRESS. DROP (Pa)	ENT. TEMP. (°C)	LVG. TEMP. (°C)	HEATING OUTPUT (kW)	FLOW RATE (GPM)	PRESS. DROP (kPa)	ENT. TEMP. (°C)	LVG. TEMP. (°C)	CONN'S (mm)														
AHU-09	FIRING RANGE	2,134	84	800	31.5	16	0.625	2	394	10	8,590	18,200	60	0.24	-34.4	-30.0	21.1	70.0	575.0	1962.0	7.140	113.2	16.1	5.4	82.2	180.0	60.0	140.0	64	2.5

CHILLED WATER COOLING COIL SCHEDULE																																				
TAG	SERVES	FACE SIZE		TUBE SIZE	ROWS	FINS PER	AIR SIDE								COOLING CAPACITY				FLUID SIDE						NOTES											
		WIDTH (mm)	HEIGHT (mm)				FLOW RATE (L/s)	PRESS. DROP (Pa)	ENT. D.B.T. (°C)	ENT. W.B.T. (°C)	LVG. D.B.T. (°C)	LVG. W.B.T. (°C)	TOTAL (kW)	SENSIBLE (kW)	FLOW RATE (L/s)	PRESS. DROP (kPa)	ENT. TEMP. (°C)	LVG. TEMP. (°C)	CONN'S (mm)																	
AHU-09	FIRING RANGE	800	32	2,134	84	16	0.625	4	197	5	8,590	18,200	42	0.17	30.6	87.0	23.3	74.0	22.2	72.0	19.6	67.3	136.3	464.9	86.5	295.1	3,282	51.7	11.3	3.8	6.7	44.0	16.7	62.0	38	1.5

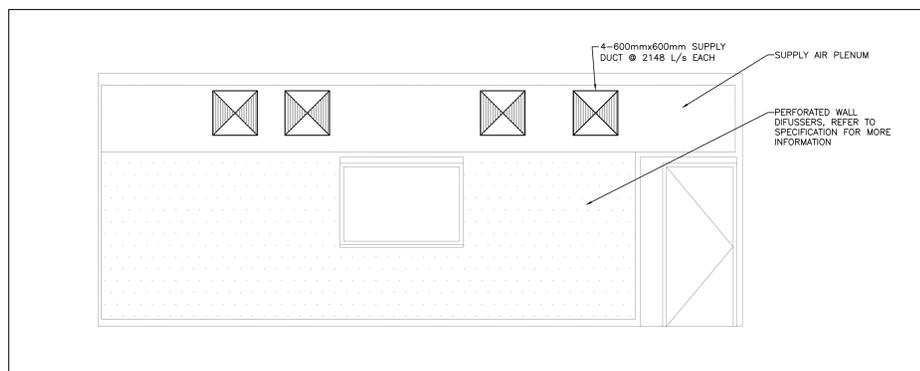
FAN SCHEDULE											
TAG	TYPE	m3/s (CFM)	EXT	ST PR	WHEEL		DRIVE	MOTOR			NOTES
					TYPE	MIN. DIA		W (hp)	VOLTS	PHASE	
AHU-09	Supply Air	8.6 (18,200)	5.4 in.wg		MPLFN	464mm (18.25 in.)	VSD, Direct	5592 (7-1/2")	575	3	4 fans operating in system. Hot water humidifier manifold needs to accommodate 50lbs/hr and dispersion of 18" or less.
AHU-13	Exhaust Air	9.5 (20,200)	4.8 in.wg		MPLFN	464mm (18.25 in.)	VSD, Direct	5592 (7-1/2")	575	3	4 fans operating in system.



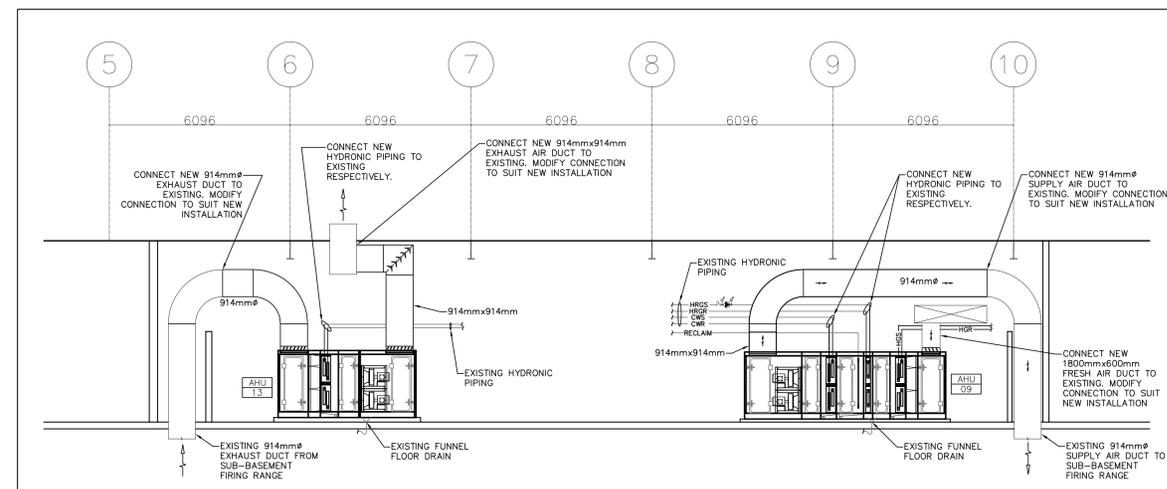
(AHU-13)

- ① INTAKE PLENUM
- ② 2" / 12" FILTERS
- ③ HEAT RECOVERY COILS
- ④ ACCESS
- ⑤ HEPA WITH PRE-FILTER
- ⑥ ACCESS
- ⑦ SUPPLY FANS

3 EXHAUST AIR HANDLING UNIT (AHU-13) DETAIL
M1.2 | M1.2 NOT TO SCALE



4 FIRING RANGE AIRWALL DIFFUSER LAYOUT
M1.2 | M1.2 1:40



5 PARTIAL PENTHOUSE SECTION – MECHANICAL
M1.2 | M1.2 1:100

APEGM
Certificate of Authorization
HDK Consulting Incorporated
No. 5539 Date: 04/30/2015



Revision	Description	Date
5		
4		
3		
2	ISSUED FOR CONSTRUCTION	FEB 23/15
1	ISSUED FOR 99% REVIEW	DEC 22/14
0	ISSUED FOR 50% REVIEW	DEC 20/14

Client: client

ROYAL CANADIAN MOUNTED POLICE D-DIVISION
1091 PORTAGE AVENUE
WINNIPEG, MANITOBA

Project: Project

WINNIPEG, MANITOBA 1091 PORTAGE AVENUE D-DIVISION HEADQUARTERS FIRING RANGE UPGRADE

Designed by: Conçu par

DH/RR

Drawn by: Dessiné par

RR

Approved by: Approuvé par

DH

PWSC Project Manager: Administrateur de Projets TPSC

PAUL DUCHARME

Drawing title: Titre du dessin

MECHANICAL DETAILS, SECTIONS SCHEDULES

Project no./No. du projet: Drawing no./No. du dessin: Revision no.

M1.1
OF 04 **0**